## **Curriculum Vitae**

# Erin A. Kolbrich, Ph.D.

## **Forensic Toxicologist**

Washington State Toxicology Laboratory 2203 Airport Way South, Suite 360 Seattle, WA 98134 206-262-6100

#### **Education**

Doctor of Philosophy *Toxicology*University of Maryland, December 2007

Bachelor of Science, Magna Cum Laude Forensic Chemistry, minor Biological Sciences Ohio University, June 2002

## **Professional Experience**

Forensic Scientist II
Washington State Toxicology Laboratory, Seattle, WA
October 2007 – present

Assistant Toxicologist
Office of the Chief Medical Examiner, Toxicology Laboratory, Baltimore, MD
May 2006 – August 2007

Pre-Doctoral Fellow

Lead Associate Investigator of a controlled MDMA administration study National Institute on Drug Abuse, Intramural Research Program, Chemistry and Drug Metabolism Section, Baltimore, MD August 2002 – September 2007

Summer Intern

Allegheny County Coroner's Office, Department of Laboratories, Pittsburgh, PA June 2001 – July 2001

#### **Certifications**

Washington State Blood Alcohol Analyst Permit, October 2007 – present

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### **Professional Affiliations**

Society of Forensic Toxicologists, *Associate Member*, 2003 – present The International Association of Forensic Toxicologists, *Member*, 2008 – present American Chemical Society, *Member*, 2002 – present Sigma Xi Professional Research Honor Society, *Associate Member*, 2002 – present Alpha Chi Sigma, *A founding member of the Gamma Nu chapter*, 2002 – present

#### **Honors**

June K. Jones Award from the Toxicology Section of the American
Academy of Forensic Sciences, 2008
Society of Forensic Toxicologists, Inc. Educational Research Awards, 2006 and 2007
University of Maryland, Baltimore Merit Award, 2002 - 2003
Provost's Undergraduate Research Grant, 2002
Ohio University Chemistry Peer Mentor Award, 2002
Ohio University Chemistry Undergraduate Research Award, 2002
American Chemical Society Analytical Award, 2001
American Chemical Society Handbook Award, 1999
Honor Societies: Mortar Board, Phi Kappa Phi, and Golden Key

#### **Peer Reviewed Publications**

**Kolbrich EA**, Goodwin RS, Gorelick DA, Hayes RJ, Stein EA, and Huestis MA. Physiological and subjective responses to controlled oral MDMA administration. J. Clin. Psychopharmacol., *In press*.

**Kolbrich EA**, Goodwin RS, Gorelick DA, Hayes RJ, Stein EA, and Huestis MA. Plasma pharmacokinetics of MDMA following controlled oral administration to young adults. Ther. Drug Monit. *In press*.

**Kolbrich EA**, Lowe RH, Huestis MA. Two-dimensional gas chromatography/electron-impact mass spectrometry with cryofocusing for simultaneous quantification of MDMA, MDA, HMMA, HMA, and MDEA in human plasma. Clin. Chem. 54 (2): 379-87 FEB 2008.

**Kolbrich EA**, Barnes AJ, Gorelick DA, Boyd SJ, Cone EJ, and Huestis MA. Major and minor metabolites of cocaine in human plasma following controlled subcutaneous cocaine administration. J. Anal. Toxicol. 30 (8): 501-10 OCT 2006.

**Kolbrich EA**, Kim I, Barnes AJ, Moolchan ET, Wilson L, Cooper GA, Reid C, Baldwin D, Hand CW and Huestis MA. Cozart<sup>®</sup> RapiScan Oral Fluid Drug Testing System: an

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evaluation of sensitivity, specificity, and efficiency for cocaine detection compared to ELISA and GC/MS following controlled cocaine administration. J. Anal. Toxicol. 27 (7): 407-411 OCT 2003.

Harrington PD, **Kolbrich E**, and Cline J. Experimental design and multiplexed modeling using titrimetry and spreadsheets. J. Chem. Educ. 79 (7): 863-864 JUL 2002.

#### **Presentations**

**Kolbrich EA**, Goodwin RS, Gorelick DA, Hayes RJ, Stein EA, and Huestis MA. MDMA, HMMA, MDA, and HMA plasma pharmacokinetics in humans following controlled MDMA administration. *American Academy of Forensic Sciences Annual Meeting*. Washington, DC (2008).

**Kolbrich EA**, Goodwin RS, Gorelick DA, Hayes RJ, Stein EA, and Huestis MA. Physiological and subjective effects following controlled administration of oral MDMA to young adult MDMA users. *Society of Forensic Toxicologists Annual Meeting*. Austin, TX (2006).

**Kolbrich EA**, Kim I, Barnes AJ, Moolchan ET, Wilson L, Cooper GA, Reid C, Baldwin D, Hand CW and Huestis MA (2003). Cozart<sup>®</sup> RapiScan Oral Fluid Drug Testing System: an evaluation of sensitivity, specificity, and efficiency for cocaine detection compared to ELISA and GC/MS following controlled cocaine administration. *Society of Forensic Toxicologists Annual Meeting*. Portland, OR (2003).

## **Posters**

**Kolbrich EA**, Lowe RH, Huestis MA. Two-dimensional gas chromatography/electron-impact mass spectrometry with cryofocusing for simultaneous quantification of MDMA, MDA, HMMA, HMA, and MDEA in human plasma. *Society of Forensic Toxicologists Annual Meeting*. Raleigh/Durham, NC (2007)

**Kolbrich EA**, Kelly TL, Barnes AJ, Kim I, Moolchan ET, Cone EJ, and Huestis MA. Saliva/plasma ratios of cocaine, ecgonine methyl ester and benzoylecgonine following controlled cocaine administration. *Society of Forensic Toxicologists Annual Meeting*. Nashville, TN (2005) and *American Psychological Association Annual Meeting*, New Orleans, LA (2006).

#### Specialized Training

Advanced Horizontal Gaze Nystagmus Training (Dr. Karl Citek), Washington DEC Program, Bainbridge Island, WA April 23, 2008

**Olympus Au400e Training,** Olympus America, Inc. Diagnostic Systems Group, Seattle, WA March 4-5, 2008.

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Courtroom Testimony Techniques – Success Instead of Survival, Ron Smith and Associates, Inc., Seattle, WA January 28-29, 2008

The Robert F. Borkenstein Course on Alcohol and Highway Safety: Testing, Research, and Litigation, Indiana University, Department of Criminal Justice, Center for Studies of Law in Action, Bloomington, IN December 2-7, 2007

Clinical or Forensic Case- A Crossroad for Interpretations, Society of Forensic Toxicologists Annual Meeting, Raleigh-Durham, NC October 16, 2007

**Benzodiazepines...The Basics and Beyond**, Society of Forensic Toxicologists Annual Meeting, Raleigh-Durham, NC October 15, 2007

Method Validation and Measurement Uncertainty for Dummies...And Smarties Too, Society of Forensic Toxicologists Annual Meeting, Austin, TX October 3, 2006

**Postmortem Pharmacokinetics: The Good, The Bad, and The Ugly**, Society of Forensic Toxicologists Annual Meeting, Austin, TX October 3, 2006

New Antidepressants and Antiepileptics: Clinical Pharmacology, Pharmacogenomics, Gene Expression, and the Neurobiology of Depression and Suicide and Forensic Toxicology, Society of Forensic Toxicologists Annual Meeting, Austin, TX October 3, 2006

How Does Your QA/QC Program Measure Up?, Society of Forensic Toxicologists Annual Meeting, Austin, TX October 4, 2006

**Postmortem Toxicology Interpretation**, Society of Forensic Toxicologists Annual Meeting, Nashville, TN October 18, 2005

**Oral Fluids** – **Research and Applications**, Society of Forensic Toxicologists Annual Meeting, Nashville, TN October 18, 2005

**Receptor Site Theory and Drug Interactions**, Society of Forensic Toxicologists Annual Meeting, Nashville, TN October 18, 2005

**Interpretive Pharmacogenomics and Proteomics for Forensic Toxicology**, Society of Forensic Toxicologists Annual Meeting, Nashville, TN October 17, 2005

Federal Bureau of Investigation Laboratory and National Institute of Justice: Laboratory Symposium on Forensic Toxicology, Washington, DC August 29-30, 2004

**Toxicology in the Emergency Room**, Society of Forensic Toxicologists Annual Meeting, Portland, OR October 21, 2003

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**Developments in Regulated Drug Testing**, Society of Forensic Toxicologists Annual Meeting, Portland, OR October 21, 2003

**Principles of Sample Preparation**, Society of Forensic Toxicologists Annual Meeting, Portland, OR October 20, 2003

**Practical Applications for LCMS in Routine Toxicology Testing**, Society of Forensic Toxicologists Annual Meeting, Portland, OR October 20, 2003

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